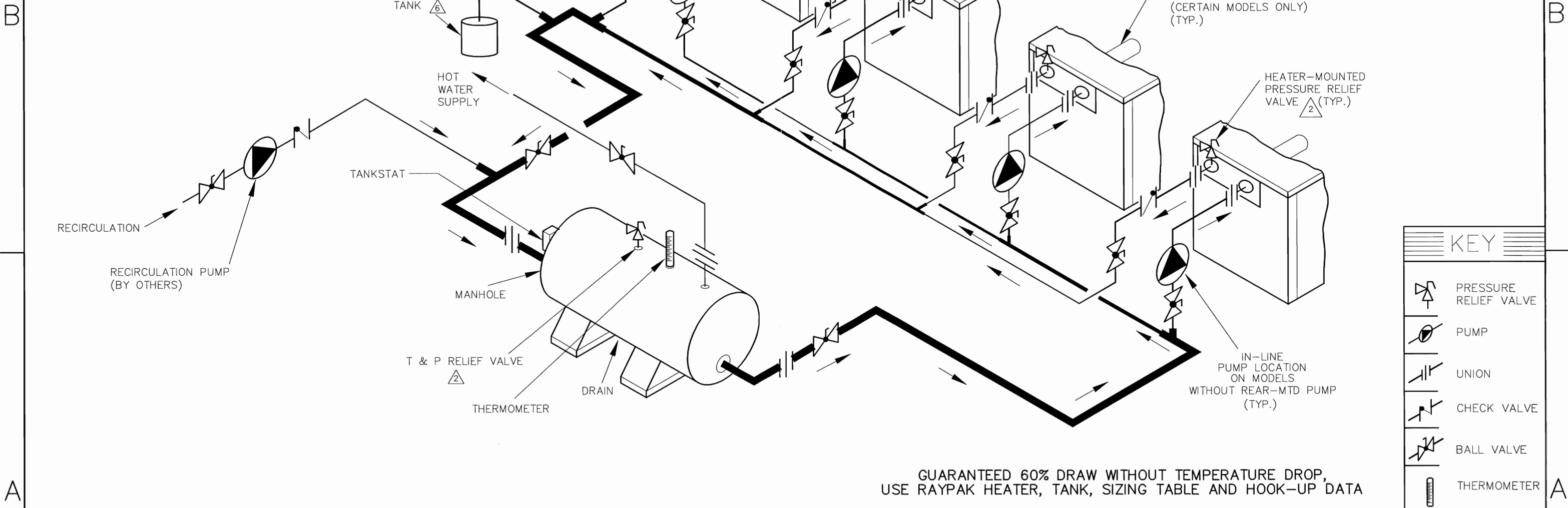


PIPE SIZES				
HEATER	2 UNITS	3 UNITS	4 UNITS	
RAYTHERM				
133	1-1/4"	1-1/2"	2"	2-1/2"
181-401	1-1/2"	2-1/2"	3"	3"
514-824	2"	3"	4"	5"
926-1826	2-1/2"	3"	4"	5"
2100-4001	3"	5"	6"	8"
MVB				
503-754	2"	4"	4"	5"
1003-2004	2-1/2"	4"	5"	5"
HI DELTA				
HD101-HD401	1-1/2"	2-1/2"	3"	3"
302-902	2"	3"	4"	5"
992-2342	2-1/2"	4"	5"	8"

THIS PIPING DIAGRAM IS RAYPAK'S RECOMMENDATION AND IS NOT INTENDED TO REPLACE AN ENGINEERED PIPING SYSTEM DESIGNED BY A PROFESSIONAL ENGINEER.

REVISIONS				
REV	DESCRIPTION	E.O.	BY	DATE
1	UPDATED FORMAT. REMOVED ADB USAGE. UPDATED USAGE. REVISED TANK PIPING. ADDED NOTE 6. REMOVED NOTE 5, RENUMBERED.		RAN	10-18-10
2	ADD 2 UNIT & 3 UNIT DATA TO PIPE TABLE. REVISED NOTES 4 & 5. ADDED NOTES 6, 7.		KA	2-25-14



KEY	
	PRESSURE RELIEF VALVE
	PUMP
	UNION
	CHECK VALVE
	BALL VALVE
	THERMOMETER

GUARANTEED 60% DRAW WITHOUT TEMPERATURE DROP, USE RAYPAK HEATER, TANK, SIZING TABLE AND HOOK-UP DATA

NOTES:

- PLUMB SWING CHECK VALVE IN GRAVITY-CLOSED POSITION.
- PIPE ALL RELIEF VALVES TO DRAIN, OR AS LOCAL CODES REQUIRE.
- INSTALL COLD WATER BETWEEN HEATER OUTLET AND TANK.
- SEE CHART "PIPE SIZES" FOR PIPE SIZES, CALCULATED AT MAXIMUM FLOW, NOT TO EXCEED 7.5 FT/SEC.
- IF HOT WATER SETPOINT EXCEEDS 160°F, SPECIFY 'H' BOILERS INSTEAD OF 'WH' WATER HEATERS.
- STANDARD PUMP SIZING BASED ON 75 EQUIVALENT FEET OF PIPING. IF DISTANCE IS GREATER, THE PUMP MUST BE SIZED TO ACCOMMODATE INCREASE IN PIPING-RELATED LOSSES.
- A TWO-FOOT MINIMUM CLEARANCE SHOULD BE USED FOR THE SPACING BETWEEN ADJACENT RAYTHERM AND HI DELTA HEATERS FOR MAINTENANCE.

ACAD: 8419.DWG

HEATERS SHOWN REPRESENT VARIOUS MODELS. BECAUSE INDIVIDUAL MODELS WILL VARY IN DESIGN AND SIZING, SEE EACH SPECIFIC HEATER TYPE FOR DETAILS.

8419	UNLESS OTHERWISE SPECIFIED: ALL UNITS ARE IN INCHES FRACTIONS ±1/32 ANGLES ±1° X. = ±.12 X.X = ±.06 X.XX = ±.03 X.XXX = ±.010 DRAFT ____ WALL ____ RADII ____ CONCENTRICITIES .020 DIA. SQUARENESS .015 IN./IN. BREAK EDGES .015 MAX. SURFACE FINISH PER ASME Y14.36M-1996	APPROVED 	DATE 3/31/14	OXNARD, CALIFORNIA	
		CHECKED D BALDWIN	DATE 5-7-03	E.O. SPR	SCALE NONE
		DRAWN E ALVARADO	DATE 5-7-03	THIS DRAWING SUBMITTED UNDER CONFIDENTIAL RELATIONSHIP, AS IT EMBODIES PROPRIETARY INFORMATION, WITH ALL RIGHTS RESERVED BY RAYPAK, INC.	
	TITLE PIPING, UNI-TEMP 60: 4 HEATERS, 1 H TANK	SIZE B			
2	MAT'L.	SERIES/MODEL WH	DWG. NO. 8419	REV 2	